

REMARKS

By this response, claims 1-21, 50 and 51 are pending, in which no claim is canceled, withdrawn, currently amended, or newly presented. Claims 22-49 were previously canceled.

The final Office Action mailed March 31, 2009 rejected claims 1, 4, 9, 11-12, 15 and 50-51 as obvious under 35 U.S.C. § 103 based on *Christodoulides et al.* (US 6,665,361) in view of *Raleigh et al.* (US 6,158,041) further in view of *Kuznicki* (US 5,282,205), claims 2, 10, 13 and 21 based on *Christodoulides et al.* in view of *Raleigh et al.* and *Kuznicki* and further in view of *Paulter et al.* (US 6,859,503), claims 3 and 14 based on *Christodoulides et al.* in view of *Raleigh et al.* and *Kuznicki* and further in view of *Mogre et al.* (US 2004/0047433), claims 5, 6 and 16-17 based on *Christodoulides et al.* in view of *Raleigh et al.* and *Kuznicki* and further in view of *Gardner* (US 5,627,499), claims 7 and 18 based on *Christodoulides et al.* in view of *Raleigh et al.* and *Kuznicki* and further in view of *Kim et al.* (US 6,851,085), and claims 8 and 19 based on *Christodoulides et al.* in view of *Raleigh et al.* and *Kuznicki* and further in view of *Love et al.* (US 7,158,482).

Applicants respectfully maintain the arguments proffered in the prior response, and submit the following additional arguments.

By way of example, independent claim 1 recites “**duplicating** and demultiplexing the data stream into a first data stream and a second data stream.”

The Examiner, on page 2 of the Office Action, contends that “ ‘duplicating’ simply indicates dividing or splitting or demultiplexing the output data....” Applicants traverse the characterization of the claim term “duplicating” as “demultiplexing.” Such rationale apparently ignores the explicit claim language of “duplicating” all together. In fact, the duplicating step has a purpose. For example, as explained in the Specification (e.g., paragraph [0009]), the data

stream is split into two data streams. One of the data streams is modified to transmit an additional bit (each of which is multiplied by a constant depending on the information bit transmitted, in the binary domain, this implies that the data stream includes either a **duplicate of the original data stream** or a binary complement of the original data stream).

The present Office Action asks, “If the output data is divided into the first and second data streams, then how come the second data stream is a duplication of the first data stream?” This question, respectfully, is based on a faulty premise: that the first data stream is a duplicate of the second data stream. The presence of two data streams stems from the operation of the claimed features, not that the two data streams are exactly the same. Namely, “duplicating” relates to the “data stream”, and thus, as a consequence in one embodiment, the demultiplexed data streams are identical because they are duplicates of the “data stream.”

The Examiner explains that the word “duplicating” is interpreted to mean two streams are equal in length. Applicants submit that one of ordinary skill would not adopt such interpretation; under this reasoning, all transmission frames, for example, would be duplicates. Thus, such an interpretation would be considered unreasonable.

On pages 2 and 3, the Office Action concludes “[i]n fact, the Applicants don’t even give weight to the word ‘duplicating’ in the apparatus (claim 15), let alone mentioned [sic].” Respectfully, Applicants have made no such admission. Because the term “duplicating” is absent from claim 15 does not permit a construction of claim 1 that omits a specific claim term. Furthermore, the exclusion of this term in claim 15 provides a different claim scope.

Lastly, the Office Action’s rebuttal concludes with “[n]ote also that copying a data stream and transmitting the original data and its copy or inverted version of it is not something novel.” Applicants respectfully note that it is the totality of the claimed features that make the claimed

invention novel and nonobvious. The step of “duplicating” is but one distinguishing point in an effort to provide frame synchronization.

As previously argued, the *Christodoulouides et al.* in fact teaches away the claimed invention. Additionally, the various combinations with *Raleigh et al.*, *Kuznicki*, *Paulter et al.*, *Mogre et al.*, *Gardner*, *Kim et al.* and *Love et al.*, are based on impermissible hindsight. Therefore, no *prima facie* case of obviousness has been established. For example, the secondary reference of *Raleigh et al.* performs, col. 8: 26-29, frame synchronization through a system synchronization circuit (not shown in FIG. 7). Thus, one of ordinary skill in the art would not be motivated, absent hindsight, to modify the first data stream according to a predetermined operation, as suggested on page 4 of the Office Action to achieve frame synchronization; rather, the teaching is to use the system synchronization circuit.

Therefore, the present application, as amended, overcomes the rejection of record and is in condition for allowance. Favorable consideration is respectfully requested. If any unresolved issues remain, it is respectfully requested that the Examiner telephone the undersigned attorney at (310) 964-0560 so that such issues may be resolved as expeditiously as possible.

To the extent necessary, a petition for an extension of time under 37 C.F.R. §1.136 is hereby made. Please charge any shortage in fees due in connection with the filing of this paper, including extension of time fees, to Deposit Account 50-0383 and please credit any excess fees to such deposit account.

Respectfully Submitted,

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